INDEX OF SURGICAL PROGRESS.

GENERAL SURGERY.

I. On the Use of the Thermopile and Secondary Batteries as a Convenient Means of Producing Electricity for Medical and Surgical Batteries. By ALEX. OGSTON (Aberdeen). The author commences by expressing his belief that electricity, the utility of which in surgery is beyond dispute, is far too seldom employed by the surgeon. The explanation of this is to be found, he states, in the extreme inconvenience attendant upon the methods of generating electricity at present made use of. Amongst other details, for instance, the Leclanché batteries are too bulky, and, being weak, too many cells are required, so that like most others they are unsuited for transport. Again the Gaiffe batteries are not easily re-charged, and in practice have been found unsuitable. The only really convenient appliance for transport—the magneto-electric induction machine—is useful only as an exciter of faradaic muscular contractions. To meet all the difficulties of the case, the author applied to Mr. J. W. Swan, the distinguished inventor of the incandescent lamp, for some suggestion, and Mr. Swan pointed out that the thermopile as a generator of electricity would probably prove to be of considerable service to the profession. A full description is given of the thermopile apparatus, from which an electro-motive force can be derived of four volts, equal, say, to seven or eight Daniell's and three or four Grove's cells, power sufficient to illuminate a small incandescent lamp. By itself, however, the thermopile is insufficient for the purposes of the practitioner, consequently a secondary battery, or as it is called, accumulator is needful, and this has been designed by Mr. Swan of a highly serviceable and portable description. For two months the author has used the apparatus, submitting it to the severest tests of practice; and he has had every cause to be satisfied with its efficacy. Its convenience and superiority to any of the methods hitherto suggested, have been so striking, that he unhesitatingly recommends it in the strongest terms. The cost of the thermopile he states in a note is about £5, and each of the secondary batteries 55 shillings.—*Lancet*, April 30, 1887, p. 867.

H. PERCY DUNN (London).

II. On the Use of Clay-Modelling in Recording Surgical Cases. By HURRY FENWICK (London). Mr. Hurry Fenwick exhibited at the Berlin Surgical Congress in April clay models of carcinomatous prostatic disease which he had moulded antemortem from patients upon whom he had been forced to perform colotomy against impending obstruction. He submitted the "method for criticism as a simple and reliable means of estimating the due shape and proportion of the gland in health and disease, as well as to allow of a permanent record being kept of the microscopical changes which may ensue in the course of a prostatic complaint." He complains that the rectal surface of the gland (*i. e.* the clinical prostate) has no fixed or accurate normal standard by which to compare the pathological deviations, and he believes that this method will permit of a normal standard being found.

The *modus operandi* is to model with the left hand while the right index is examining, and when the model nearly corresponds, to correct it finally by passing the right index over the prostate piece by piece whilst the left is correspondingly passed over the rough model. "The living and the dead clay are thus compared, and it is curious how well, how accurately the two forefingers work together if their movements be simultaneous. Any mistake either of elevation or depression is immediately recognized and altered with ease." A little oil on the surface of the clay model making the moulding easier. (Author's abstract).

III. On the Administration of Carbonate of Lime as a Means of Arresting the Growth of Cancerous Tumours. By PETER HOOD, M.D., (London). Dr. Hood wrote a paper some twenty years ago on the action of carbonate of lime, and since that